

USC §103(a) as being unpatentable over Gilbert in view of Funk, Kosugi et al. and further in view of U.S. Patent No. 6,072,792 (Mazur et al.). Claims 11-18 have been rejected under 35 USC §103(a) as being unpatentable over Gilbert in view of Funk, Kosugi et al., and further in view of U.S. Patent No. 6,091,741 (Fujiwara et al.). Claim 19 has been rejected under 35 USC §103(a) as being unpatentable over Gilbert in view of Funk, Kosugi et al., and further in view of U.S. Patent No. 5,815,820 (Kiem et al.). Claims 21, 22 and 24-30 have been rejected under 35 USC §103(a) as being unpatentable over Gilbert in view of Funk, Kosugi et al. and further in view of GSM 04-08. Claims 31-39, 41 and 42 have been rejected under 35 USC §103(a) as being unpatentable over Gilbert in view of Funk, Kosugi et al., and further in view of Fujiwara et al.

Claims 1, 2, 4-19, 21, 22, 24-39, 41 and 42 remain pending in the present application.

35 USC §103 Rejections

Applicants reassert all arguments submitted in Applicants' previous Amendment filed September 9, 2002.

Claims 1, 2, 4 and 5 have been rejected under 35 USC §103(a) as being unpatentable over Gilbert et al. in view of Funk and further in view of Kosugi et al. Applicants respectfully traverse these rejections.

Regarding claim 1, Applicants submit that neither Gilbert et al. nor Funk, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of this claim, of inter alia, providing a signal responsive to at least one monitored criterion for controlling at least one output criterion of the

transmitter where the at least one monitored criterion includes the number of transmitted data bursts in a frame.

Gilbert teaches the provision of a heat sensitive module 140 which tends to increase in temperature due to transmissions (see col. 2, lines 20-21). Referring then to Fig. 2 in the portion of the description in col. 2, lines 32-43, here it states that the controller provides operational control for heat sensitive portions of the communication service. Transmission operations are supported through a data transmission block 240. Thus, it is clear that in Gilbert there is no monitoring “providing a signal responsive to the at least one monitor criterion for controlling at least one output criterion of the transmitter” because Gilbert is interested in the heat sensitive module 140 and not the transmitter.

Funk relates to a PCMCIA card inserted into the PCMCIA slot of a lap top computer (referring to col. 1, lines 48-58). Furthermore, it is apparent from lines 59-61, col. 1, that heat dissipation is what causes the problems no the transmission itself. Funk discloses that the cards used to be low power devices and due to that the heat dissipation never was an issue before. So even at low transmission levels the device heats up, but this is something due to poor circulation and not the transmitter itself. This is further supported by the sentence starting on line 1, col. 2 which makes it clear that the heat is generated by the absence of proper heat dissipation not the transmitter. More specifically, Funk does not teach “monitoring at least one criterion associated with heat generated by the transmitter” because the monitoring carried out in Funk is directed to the old device and any action is caused by the lack of poor air circulation.

Applicants submit that there will be no motivation for one skilled in the

relevant art to combine Gilbert et al. and Funk since Gilbert et al. relates to heat increase resulting from transmissions, and the heat dissipation causing problems in Funk is not related to the transmission itself.

Moreover, Applicants submit that the combination of Gilbert et al. and Funk does not disclose or suggest the limitations in the claims of present invention since this combination does not lead to a method for controlling a transmitter of a portable radio communication apparatus in which the operation of the transmitter is regulated dependent upon the monitored number of data bursts transmitted in a frame, this being indicative the heat generated by the transmitter, as recited in the claims of the present application. Gilbert relates to a method for controlling the temperature of a wireless communication device. Significantly, however, Gilbert does not teach, nor suggest manipulation of the operation of the actual power amplifier or transmitter, and therefore cannot be regarded as disclosing a method or apparatus for controlling the transmitter, this being a claimed feature of the present invention. Funk merely discloses placing pauses during the transmission or changing the transmission power level of a mobile radio device in the context of a PCMCIA card, when the temperature of the device, which measured as a whole, becomes too hot. Neither Gilbert nor Funk deals with the problem tackled by the present invention which is that of limiting the risk of the transmitter and more specifically, the power amplifier overheating due to extended operation in a multi-slot transmission such as GPRS and IISCS. Neither reference discloses a mobile phone transmitter temperature control arrangement in which the transmitter operation is monitored by measuring the number of data bursts that are transmitted in a frame to give an indication of the transmitter temperature and/or heat output, and then using the

monitored number of data bursts to apply some control measures to regulate the transmitter operation accordingly, as recited in the claim of the present invention.

Applicants assert that the Examiner's rejections can only be based on impermissible hindsight since the rejections appear to be based on an artificial extrapolation of the cited references. Applicants assert this because there is no technical motivation to modify the Gilbert transmitter by the introduction of the features from Funk. The Gilbert embodiments work satisfactorily for the purpose they set to serve, and so there is no incentive to modify the Gilbert embodiments any further. Furthermore, it should be noted that there are no stated deficiencies with the transmitter in Gilbert and, therefore, no motivation to modify its structure, or operation. Thus, any combination of Gilbert and Funk is an improper combination in that it makes use of impermissible hindsight. In this regard the Examiner is respectfully reminded that to reject claims in an application under Section 103, an examiner must show an un-rebutted prima facie case of obviousness. See In re Deuel, 51 F.3d 1552, 1557, 34 USPQ2d 1210, 1214 (Fed. Cir. 1995). In the absence of a proper prima facie case of obviousness, an applicant who complies with the other statutory requirements is entitled to a patent. See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

When a rejection depends on a combination of prior art references, there must be some teaching, suggestion, or motivation to combine the references. See In re Geiger, 815 F.2d 686, 2 USPQ2d 1276, 1278 (Fed. Cir. 1987). Although the suggestion to combine references may flow from the nature of the problem, see Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc., 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1630 (Fed. Cir. 1996), the suggestion more often comes from the teachings of

the pertinent references, see In re Sernaker, 702 F.2d 989, 994 217 USPQ 1, 5 (Fed. Cir. 1983), or from the ordinary knowledge of those skilled in the art that certain references are of special importance in a particular field, see Pro-Mold, 75 F.3d at 1573 (citing Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 297 n.24, 227 USPQ 657, 667 n. 24 (Fed. Cir. 1985)). Therefore, “[w]hen determining the patentability of a claimed invention which combines two known elements, the question is whether there is something in the part art as a whole to suggest the desirability, and thus the obviousness, of making the combination.” See In re Beattie, 974 F.2d 1309, 1311-12, 24 USPQ2d 1040, 1042 (Fed. Cir. 1992) (quoting Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 1462, 221 USPQ 481, 488 (Fed. Cir. 1984)).

As the CAFC has stated in In re Rouffet, 47 USPQ2d 1458 (CAFC, 1998) at pages 1457 and 1458:

As this court has stated, “virtually all Environmental Designs, Ltd. v. Union Oil Co., 713 F.2d 693, 698, 218 USPQ 865, 870 (Fed. Cir. 1983); see also Richdel, Inc. v. Sunspool Corp., 714 F.2d 1573, 1579-80, 219 USPQ 8, 12 (Fed. Cir. 1983) (“Most, if not all, inventions are combinations and mostly of old elements.”). Therefore an examiner may often find every element of a claimed invention in the prior art. If identification of each claimed element in the prior art were sufficient to negate patentability, very few patents would ever issue. Furthermore, rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be “an illogical and inappropriate process by which to determine patentability.” Sensonics, Inc. v. Aerosonic Corp., 81 F.3d 1566, 1570, 38 USPQ2d 1551, 1554 (Fed. Cir. 1996).

To prevent the use of hindsight based on the invention to defeat patentability of the invention, this court requires the examiner to show a motivation to combine the references that create the case of obviousness. In other words, the examiner

must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed.

The rejection of a patent application for obviousness under 35 U.S.C. §103 must be based on evidence comprehended by language of the section, and the search for and analysis of prior art includes evidence relevant to a finding of whether there is a teaching, motivation, or suggestion to select and combine references relied on as evidence of obviousness. The factual inquiry whether to combine references must be thorough and searching and based on objective evidence of record. The Board of Patent Appeals and Interferences must explain reasons why one of ordinary skill in art would have been motivated to select references and to combine them to render claimed invention obvious. In re Lee, 61 USPQ 2d 14-30 (CAFC, 2002).

Obviousness is a question of law. Panduit Corp. v. Dennison Mfg. Co., 810F.2d 1561, 1568 (Fed. Cir. 1987) cert. denied, 481 U.S. 1052 (1986). The courts have held that the proper approach to the obviousness issue starts with the claimed invention as a whole. Kimberly-Clark Corp. v. Johnson & Johnson, 745 F.2d 1437, 1448 (Fed. Cir. 1984). The invention as a whole embraces the structure, its properties and the problem it solves. In re Wright, 848 F.2d 1216, 1219 (Fed. Cir. 1988). Section 103 is applicable when there is no single prior art item that completely discloses, i.e., anticipates, the claimed invention. Kalman v. Kimberly-Clark, 713 F.2d 760 (Fed. Cir. 1983).

The proper approach to making a determination of obviousness was described by the Supreme Court in Graham v. John Deere Co., 383 U.S. 1, 17

(1966):

Under §103, the scope and content of the prior art are to be determined, differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined.

When a rejection depends on a combination of prior art reference, there must be some teaching, suggestion, or motivation to combine the references. See In re Geiger, 815 F.2d 686, 688, 2 USPQ2d 1276, 1278 (Fed. Cir, 1987). (Emphasis added) Although the suggestion to combine references may flow from the nature of the problem, see Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc., 75 F.3d 1568, 1573, 37 USPQKI2 1626, 1630 (Fed. Cir. 1996), the suggestion more often comes from the teachings of the pertinent references, see In re Sernaker, 702 F.d2 989, 994 217 USPQ 1, 5 (Fed. Cir. 1983), or from the ordinary knowledge of those skilled in the art that certain references are of special importance in a particular field, see Pro-Mold, 75 F.3d at 1573 (citing Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 297 n.24, 227 USPQ 657, 667 n.24 (Fed. Cir. 1985)). Therefore, “[w]hen determining the patentability of a claimed invention which combines two known elements, “the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination.” See In re Beattie, 974 F.2d 1309, 1311-12,24 USPQ2d 1040, 1042 (Fed. Cir. 1992) (quoting Lindemana Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 1462, 221 USPQ 481, 488 (Fed. Cir. 1984)).

Therefore, Applicants submit that there will be no motivation for one skilled in the relevant art to combine Gilbert et al. and Funk and that the combination of Gilbert et al. and Funk does not disclose or suggest the limitations in the claims of

present invention since this combination does not lead to a method for controlling a transmitter of a portable radio communication apparatus in which the operation of the transmitter is regulated dependent upon the monitored number of data bursts transmitted in a frame, this being indicative the heat generated by the transmitter, as recited in the claims of the present application.

Regarding claims 2, 4 and 5, Applicants submit that these claims are dependent on independent claim 1 and, therefore, are patentable at least for the same reasons noted previously regarding independent claim 1.

Accordingly, Applicants submit that neither Gilbert et al. nor Funk, taken alone or in any proper combination, disclose, suggest, or render obvious the limitations in the combination of each of claims 1, 2, 4 and 5 of the present application. Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

Claims 6-9 have been rejected under 35 USC §103(a) as being unpatentable over Gilbert in view of Funk, Kosugi et al., and further in view of GSM 04-08 version 4.19.1 (ETS 300, 557). Applicants submit that claims 6-9 are dependent on independent claim 1 and, therefore, are patentable for at least the same reasons noted previously regarding this independent claim.

Moreover, referring to the Examiner's claim rejections based on the further introduction of the GSM 04.08 specification, it is respectfully submitted that the claimed features of changing the power classmark in response to a determination that the number of data bursts exceeds a predetermined limit or that the monitored transmission power level exceeds a predetermined level are features that cannot objectively be derived from the disclosure of GSM 04.08 Version 4.19.1. This is

because the disclosure does not teach the skilled person to change the power classmark if the monitored power level or data burst count is above a predetermined level. To be precise, the GSM document merely indicates that classmark may change during a RR session. This, is not a common event but may occur if the user were to change his equipment during a connection, for instance, by disconnecting a mobile phone from a vehicle mounted transceiver, or mounting a mobile phone onto a car phone cradle (see reference to "eg due to addition of power amplification"). However, the cited GSM document simply does not disclose nor indeed gives any pointers to the claimed feature that the transmission power level or data bursts being monitored and if these exceed the predetermined level then the power classmark is changed. It should go unnoticed that in fact it is the present inventors who have made the recognition that it would be beneficial to harness the power classmark change procedure in order to control the output power of a mobile phone when the monitored level of the transmission power or number of data bursts exceed a predetermined level. Thus, Applicants assert that impermissible hindsight has been used by the Examiner in using the GSM reference in combination to reject the claims of the present invention.

Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest, or render obvious the limitations in the combination of each of claims 6-9 of the present application. Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

Claim 10 has been rejected under 35 USC §103(a) as being unpatentable over Gilbert in view of Funk, Kosugi et al. and further in view of U.S. Patent No.

6,072,792 (Mazur et al.).

Kosugi et al. discloses a power amplifier that amplifies a modulated carrier signal having an amplitude modulation component and a phase modulation component to generate a transmission signal.

Applicants submit that claim 10 is dependent on independent claim 1 and, therefore, is patentable for at least the same reasons noted previously regarding this independent claim.

Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest, or render obvious the limitations in the combination of claim 10 of the present application. Applicants respectfully request that this rejection be withdrawn and that this claim be allowed.

Claims 11-18 have been rejected under 35 USC §103(a) as being unpatentable over Gilbert in view of Funk, Kosugi et al., and further in view of U.S. Patent No. 6,091,741 (Fujiwara et al.). Applicants respectfully traverse these rejections.

Regarding independent claim 11, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of claim 11 of, inter alia, a method for controlling a transmitter of a portable radio communication apparatus where the transmitter transmits data bursts during one or more of the time slots in a frame, monitoring the number of data bursts transmitted on time slots in a frame, or comparing the monitored number with a predetermined limit and changing the operation of the transmitter if the monitored number falls outside the predetermined limit. As noted previously, there would be no motivation for one skilled in the

relevant art to combine Gilbert et al. and Funk and that the combination of Gilbert et al. and Funk does not disclose or suggest the limitations in the claims of present invention since this combination does not lead to a method for controlling a transmitter of a portable radio communication apparatus in which the operation of the transmitter is regulated dependent upon the monitored number of data bursts transmitted in a frame, this being indicative the heat generated by the transmitter. Similarly, Fujiwara et al. does not disclose or relate to at all transmitting data bursts or monitoring the number of data bursts transmitted as recited in claim 11 of the present application. Fujiwara et al. discloses a radio packet communication system capable of avoiding transmission collisions. This is not transmitting data bursts or monitoring data bursts as recited in the claims of the present application. Further, Applicants submit there would be no motivation to combine the disclosure of Fujiwara et al. with the disclosures of Gilbert et al. and Funk.

Regarding claims 12-18, Applicants submit that these claims are dependent on independent claim 11 and therefore are patentable for at least the same reasons noted regarding independent claim 11.

Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest, or render obvious the limitations in the combination of each of claims 11-18 of the present application. Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

Claim 19 has been rejected under 35 USC §103(a) as being unpatentable over Gilbert in view of Funk, Kosugi et al., and further in view of U.S. Patent No. 5,815,820 (Kiem et al.).

Kiem et al. discloses a portable radio telephone that adjusts its transmit power responsible to the position of a moveable antenna.

Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of claim 19 of the present application of, inter alia, a method for controlling a transmitter of a portable radio communication apparatus where the transmitter transmits data bursts during one or more of time slots and the transmission power level is monitored and compared with a predetermined limit where the monitor transmission power level is compared with a predetermined power transmission level and if the monitor transmission power level is above a predetermined level then the maximum allowed output power level is decreased by changing the power classmark of the portable radio communication apparatus. As noted previously, there would be no motivation for one skilled in the relevant art to combine Gilbert et al. and Funk and that the combination of Gilbert et al. and Funk does not disclose or suggest the limitations in the claims of present invention since this combination does not lead to a method for controlling a transmitter of a portable radio communication apparatus in which the operation of the transmitter is regulated dependent upon the monitored number of data bursts transmitted in a frame, this being indicative the heat generated by the transmitter. Applicants assert that Kosugi et al., and Kiem et al. do not overcome the substantial defects noted previously regarding Gilbert et al. and Funk.

Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest, or render obvious the limitations in the combination of claim 19 of the present application. Applicants respectfully

request that this rejection be withdrawn and that this claim be allowed.

Claims 21, 22 and 24-30 have been rejected under 35 USC §103(a) as being unpatentable over Gilbert in view of Funk, Kosugi et al. and further in view of GSM 04-08. Applicants respectfully traverse these rejections.

Regarding claim 21, Applicants submit that none of the cited references taken alone or in any proper combination disclose, suggest or render obvious the limitations in the combination of claim 21 of, inter alia, a radio telephone system that includes a portable radio communication apparatus where the apparatus has a transmitter for transmitting data bursts during one or more time slots in a frame and the system includes monitoring means for monitoring at least one criteria that comprises the number of transmitted data bursts in a frame and where at least one output criterion of the transmitter is responsive to the monitored criterion. As noted previously, there would be no motivation for one skilled in the relevant art to combine Gilbert et al. and Funk and that the combination of Gilbert et al. and Funk does not disclose or suggest the limitations in the claims of present invention since this combination does not lead to a method for controlling a transmitter of a portable radio communication apparatus in which the operation of the transmitter is regulated dependent upon the monitored number of data bursts transmitted in a frame, this being indicative the heat generated by the transmitter.

Regarding claims 22 and 24-30, Applicants submit that these claims are dependent on independent claim 21 and, therefore, are patentable over the cited references at least for the same reasons noted regarding claim 21.

Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest, or render obvious the limitations in

the combination of each of claims 21, 22, and 24-30 of the present application.

Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

Claims 31-39, 41 and 42 have been rejected under 35 USC §103(a) as being unpatentable over Gilbert in view of Funk, Kosugi et al., and further in view of Fujiwara et al.

Applicants submit that none of the cited references taken alone or in any proper combination disclose, suggest or render obvious the limitations in the combination of these claims of, inter alia, a transmitter for transmitting data bursts during one or more time slots in a frame where the number of transmitted data bursts is monitored and compared with a predetermined limit and the operation of the transmitter changed if the monitor number of transmitter data bursts falls outside a predetermined limit, or decreasing the maximum allowed output transmission power level by changing the power classmark of a portable radio communication apparatus if the monitor transmission power level is above the predetermined level, or sending a power classmark change request to a network responsive to the monitored criterion and the network accordingly changing the power classmark of a portable radio communication apparatus. As noted previously, there would be no motivation for one skilled in the relevant art to combine Gilbert et al. and Funk and that the combination of Gilbert et al. and Funk does not disclose or suggest the limitations in the claims of present invention since this combination does not lead to a method for controlling a transmitter of a portable radio communication apparatus in which the operation of the transmitter is regulated dependent upon the monitored number of data bursts transmitted in a frame, this being indicative the heat

generated by the transmitter.

Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest, or render obvious the limitations in the combination of each of claims 31-39, 41 and 42 of the present application. Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

In view of the foregoing remarks, Applicants respectfully submit that claims 1, 2, 4-19, 21, 22, 24-39, 41 and 42 are in condition for allowance. Accordingly, early allowance of such claims is respectfully requested.

To the extent necessary, Applicant petitions for an extension of time under 37 CFR §1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees and excess claim fees, to Deposit Account No. 01-2135 (referencing case No. 367.39585X00) and please credit any excess fees to such deposit account.

Respectfully submitted,



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